

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

### Pipeline and Hazardous Materials Safety Administration

DOT-SP 20631 (FIRST REVISION)

EXPIRATION DATE: 2020-06-30

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Americase, LLC Waxahachie, TX

### 2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, mark, sale and use of alternative packaging for the transportation in commerce of damaged, defective, or recalled lithium ion cells and batteries and lithium metal cells and batteries and these cells or batteries contained in or packed with equipment. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Maritime Dangerous Goods Code (IMDG) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use, use as a component of a transport vehicle or other device, or other uses not associated with transportation in commerce.
- c. In accordance with 49 CFR 107.107(a) party status may not be granted to a manufacturing permit. These packagings may be used in accordance with 49 CFR 173.22a.
- d. This special permit serves as an "exemption" as defined in 7.9.1 of the IMDG Code (see IMO MSC/Circ. 1075-Granting

Exemptions from the Provisions of the IMDG Code) and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.

- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180 and the IMDG Code.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR Subparts C through H of Part 172 in that shipping papers, marking, labeling, emergency response information, and training are not required for batteries and cells already excepted by § 173.185(c); § 173.185(c)(1)(iii), (c)(1)(iv), (c)(1)(v) and (c)(3) in that alternative marking and documentation are authorized and alternative means of identifying any special procedures to be followed in the event a package is damaged is authorized; and § 173.185(f) and Packing Instruction 908 of the IMDG in that more than one lithium cell or battery per alternative package is authorized as specified herein.
- 5. <u>BASIS</u>: This special permit is based on the application of Americase LLC dated March 26, 2018, submitted in accordance with § 107.105 and the public proceeding thereon and additional information dated July 26, 2018.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Material Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries*	9	UN3480	N/A
Lithium ion batteries contained in equipment <i>or</i> Lithium ion batteries packed with equipment*	9	UN3481	N/A
Lithium metal batteries*	9	UN3090	N/A
Lithium metal batteries contained in equipment <i>or</i> Lithium metal batteries packed with equipment*	9	UN3091	N/A

<sup>\*</sup> Only damaged, defective, recalled cells or batteries including those contained in equipment or packed with equipment may be transported under the terms of this special permit.

#### 7. SAFETY CONTROL MEASURES:

# a. OPERATIONAL CONTROLS:

- (1) Damaged, defective, recalled lithium cells and batteries, lithium cells or batteries contained in equipment, and lithium cells or batteries packed with equipment must have originally met the requirements for testing in accordance with the edition of the UN Manual of Tests and Criteria authorized at the time of testing, prior to becoming damaged, defective, or recalled.
- (2) For transportation by cargo vessel, only lithium cells or batteries including the cells or batteries contained in or packed with equipment with the lithium content not exceeding 1 g for a lithium metal cell or 2 g for a lithium metal battery and with the energy content not exceeding 20 Wh for a lithium ion cell or 100 Wh for a lithium ion battery are excepted from 49 CFR Part 172 Subparts C through H.
- (3) For transportation by highway or rail, only lithium cells or batteries including the cells or batteries contained in or packed with equipment with the lithium content not exceeding 5 g for a lithium metal cell or 25 g for a lithium metal battery and with the energy content not exceeding 60 Wh for a lithium ion cell or 300 Wh for a lithium ion battery are excepted from 49 CFR Part 172 Subparts C through H.
- (4) Packages must be stored away from heat.
- (5) Lithium cells and batteries must be secured and protected against short circuiting.
- (6) Equipment containing lithium cells or batteries must be protected from inadvertent activation.

#### b. PACKAGING:

(1) INNER PACKAGING: Each cell or battery or each piece of equipment containing these cells or batteries must be individually packed in a non-metallic packaging that completely encloses the cell or battery or the piece of equipment containing the cells or batteries.

#### (2) OUTER PACKAGING:

- (i) The completed inner package must be surrounded by cushioning material that is non-combustible, non-conductive, and absorbent and placed in an 1A2 or 1H2 drum, that is capable of meeting the drop test requirements in § 173.185(c)(2).
- (ii) Each outer packaging must be completely filled with the thermally insulating fire suppressant material described in Americase LLC's application dated March 26, 2018 and on file with the Office of Hazmat Safety Approvals and Permits Division (OHMSAPD), in a sufficient quantity and manner that will suppress lithium battery fires, heat and smoke and absorbs the smoke, gases and flammable vapors and electrolytes during a thermal runaway incident.
- (iii) The package must be filled with the thermally insulating fire suppressant material described in Americase LLC's application dated March 26, 2018 and on file with OHMSAPD, wherever possible, as dunnage to protect the cells and batteries and retard rapid heat transfer.
- (3) Except when lithium cells or batteries are contained in or packed with equipment, the gross weight of a single package may be up to 140 kg (310 pounds) provided sufficient amounts of the fire suppressant are used in a manner to suppress thermal events, absorb flammable (e.g. hydrogen) and toxic gases, absorb liquids such as flammable electrolyte and prevent propagation of thermal runaway from one cell or battery to another.
- c. MARKING: Each package covered under the terms of this special permit must be durably and legibly marked and displayed on a background of contrasting color with the following:
  - (1) "DOT-SP 20631";
  - (2) The words "DO NOT TRANSPORT BY AIR DAMAGED/DEFECTIVE LITHIUM ION BATTERIES" or "DO NOT
    TRANSPORT BY AIR DAMAGED/DEFECTIVE LITHIUM METAL

BATTERIES" as appropriate in letters at least 12mm in height;

- (3) Lithium battery handling marking specified in 173.185(c)(3)(i);
- (4) A phone number for additional information; and
- (5) Additionally, each package may be marked with a QR code which when scanned provides a direct link to a specific URL where the most recent version of the special permit can be viewed or downloaded. If the QR code is marked on the packaging, the URL must also be marked on the packaging.
- d. Detailed closure, packing, and shipping instructions must be provided to individuals preparing shipments under the terms of the special permit.

#### 8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Safety Approvals and Permits Division for a specific manufacturing facility.

- e. A current copy of this special permit must be maintained at each facility where the packaging is manufactured under this special permit. It must be made available to a DOT representative upon request.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>
  - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
  - o Registration required by  $$107.601 \text{ } \underline{\text{et seq.}}, \text{ when applicable.}$

Unless otherwise excepted by this special permit, each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) — "The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special

permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Wand by

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at <a href="http://hazmat.dot.gov/sp app/special permits/spec perm index.htm">http://hazmat.dot.gov/sp app/special permits/spec perm index.htm</a>
Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Andrew Eckenrode